

CODE ANALYSIS

APPLICABLE CODES			
	Year		Year
International Building Code	2006	National Electrical Code	2006
International Mechanical Code	2006	Uniform Code for Building Conservation	
International Plumbing Code	2006	ADA Accessibility Guidelines	ICC/ANSI 117.1 1998
International Fire Code	2006		
International Energy Conservation Code	2006		

A. Occupancy and Group: EXISTING BUILDING B
Change in Use: Yes No ☒ Mixed Occupancy: Yes No ☒
Special Use and Occupancy (e.g. High Rise, Covered Mall):

B. Seismic Design Category: I Design Wind Speed: 90 mph

C. Type of Construction (circle one):
I I II III IV V
A B A B A HT A B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):
North: NA South: NA East: NA West: NA

E. Mixed Occupancies: NA Nonseparated Uses: ☒

F. Sprinklers:
Required: NA Provided: yes Type of Sprinkler System: NA

G. Number of Stories: 1 Building Height: 13'

H. Actual Area per Floor (square feet): 21,350 SF

I. Tabular Area: 23,000 SF

J. Area Modifications:
$$a) A_a = A_1 + \left[\frac{A_1 I_1}{100} \right] + \left[\frac{A_1 I_2}{100} \right] \quad I_1 = 100 \left[\frac{F}{P} - 0.25 \right] \frac{W}{30}$$
$$I_2 = 100 [1 - 0.25] \times 30/30 = 75$$
$$A_a = 15,500 + [15,500 \times 75/100] + [15,500 \times 300/100] = 15,500 + 11,626 + 46,500 = ?$$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$$

c) Total Allowable Area for:
1) One Story: NA
2) Two Story: A_a(2)
3) Three Story: A_a(3)

d) Unlimited Area Building: Yes NA No NA Code Section: NA

K. Fire Resistance Rating Requirements for Building Elements (hours).

Fire-Resistive Requirements:	Type: I-II-B
Bearing walls - Interior:	0
Exterior Non-Bearing Walls:	0
Structural Frame:	0
Partitions:	0
Shafts:	0
Floors - Ceilings:	0
Roofs - Ceilings:	0

L. Design Occupant Load: NA - 1 Exit Required
Exit Width Required: NA Exit Width Provided: NA

M. Minimum Number of Required Plumbing Facilities:
a) Water Closets - Required (m) NA (f) NA Provided (m) (f)
b) Lavatories - Required (m) NA (f) NA Provided (m) (f)
c) Bath Tubs or Showers: NA
d) Drinking Fountains: NA Service Sinks: NA

- FOOTNOTES:
- In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.
 - Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
 - High Rise Requirements.
 - Atriums.
 - Performance Based Criteria.
 - Means or Egress Analysis.
 - Fire Assembly Locator Sheet.
 - Exterior and Interior Accessibility Route.
 - Fire Stopping, Including Tested Design Number.

PROVO DETENTION LIGHTNING PEAK ROOFING IMPROVEMENTS

All Roofing material manufacturers are required to meet or exceed the manufacturing UL assembly # as outlined in the Underwriters Laboratories, Inc. Roofing Materials and Systems Directory Book

STEVENS ROOFING SYSTEM, DIV OF JPS ELASTOMERICS, CORP.
9 Sullivan Road
Holyoke, MA 01040

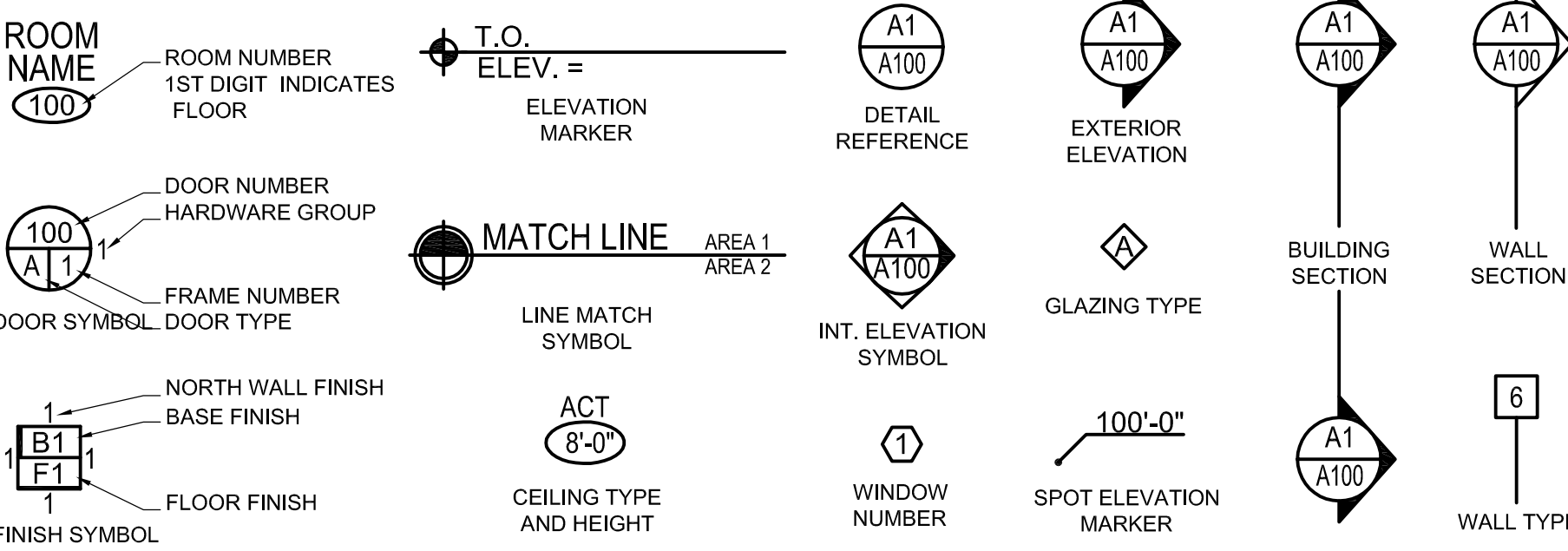
UL R10321
Class A fully Adhered Stevens "EP TOP" Single Ply membrane systems - criteria 7

GENFLEX ROOFING SYSTEMS
Suite A 1722 Indian Wood Circle
Maumee, OH 43537

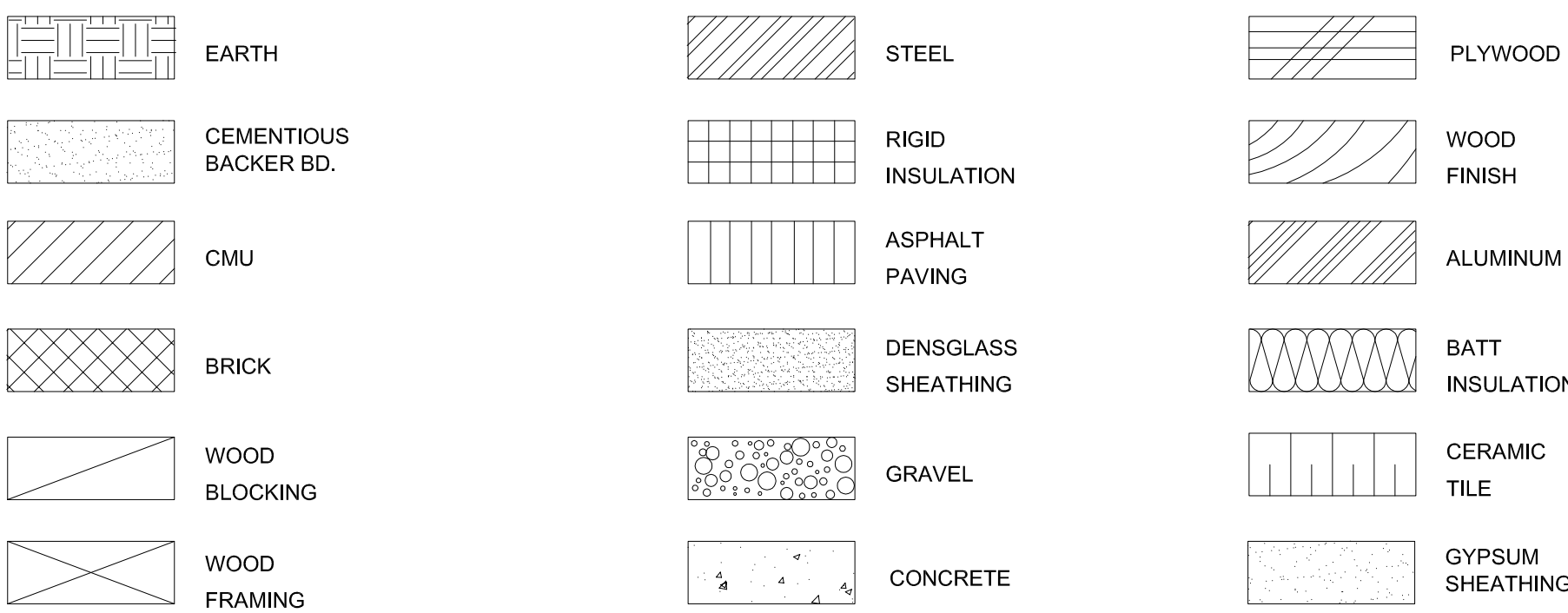
UL R9334
PVC, Fully Adhered Method or TPO Fully Adhered Method

Please note: All Other manufacturers will be reviewed for approval prior to bid. All UL manufacturer assembly criteria must be provided to the architect or owner for review and approval prior to bidding.

SYMBOL LEGEND



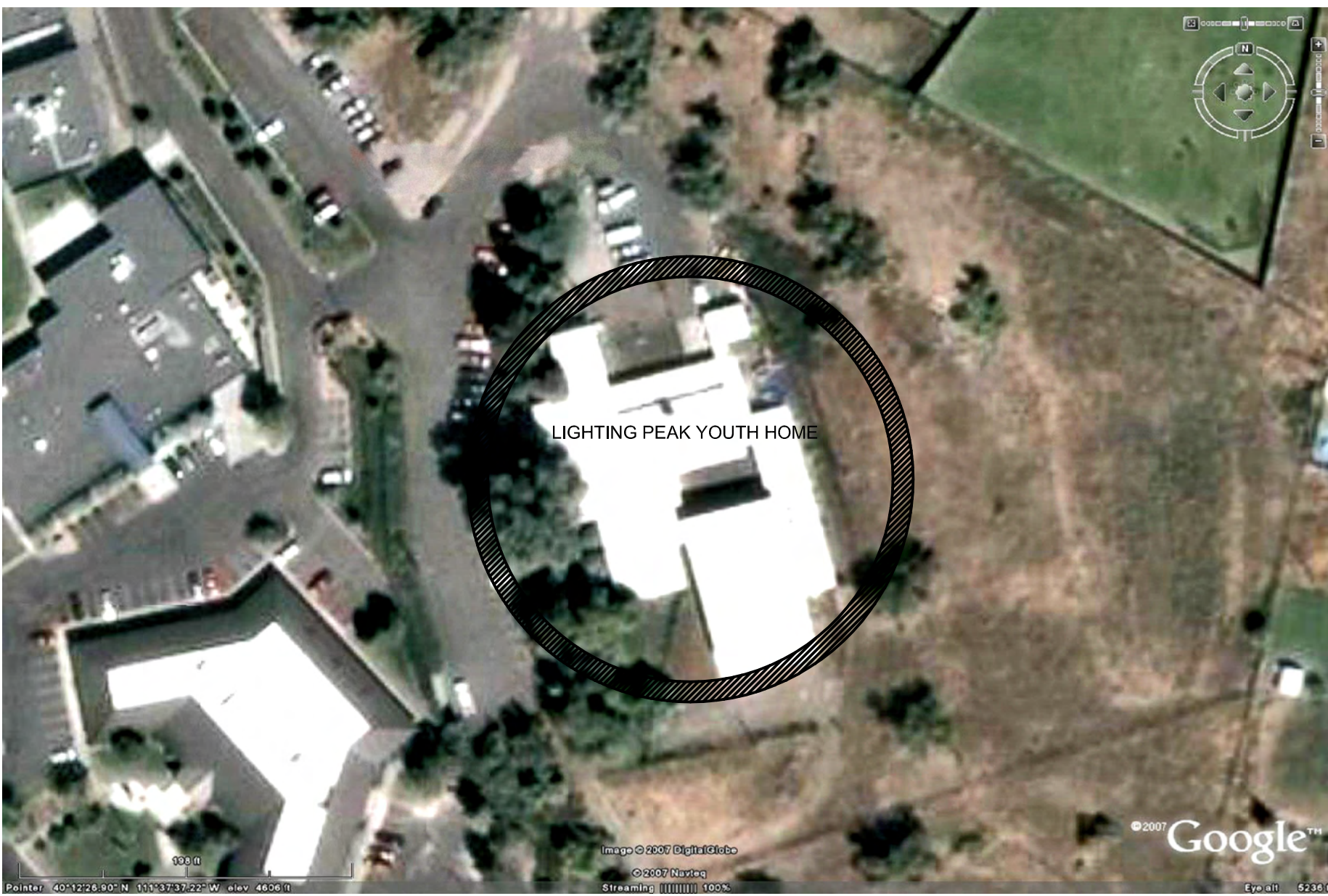
GRAPHIC SYMBOLS



VACINITY MAP



SITE MAP



DRAWING INDEX

GENERAL
GH101 GENERAL INFORMATION
ARCHITECTURAL
AD101 EXISTING ROOF PLAN
AE101 ROOF PLAN
NOTE: THE SHEETS LISTED ABOVE REPRESENT A FULL SET OF CONSTRUCTION DOCUMENTS AND INCLUDE A DETAIL BOOK AND A PROJECT MANUAL AND SHALL NOT BE SEPERATED. ANY CONTRACTOR, SUBCONTRACTOR, VENDOR OR ANY OTHER PERSON PARTICIPATING IN OR BIDDING ON THIS PROJECT SHALL BE RESPONSIBLE FOR REVIEWING ALL THE CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO DRAWINGS, DETAILS, PROJECT MANUAL, SPECIFICATIONS AND ANY AND ALL ADDENDA ISSUED.

PROJECT TEAM

OWNER:
State of Utah - Division of Facilities
Construction & Management.
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DIVISION OF JUVENILE JUSTICE SERVICES
PROVO DETENTION - LIGHTNING PEAK
ROOFING IMPROVEMENTS

1955 SOUTH DAKOTA LANE
PROVO, UTAH 84606

AUGUST 10, 2007

DFCM PROJECT # 07152430



State of Utah-Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION
AND MANAGEMENT

4110 State Office Building/Salt Lake City, Utah 84114/538-3018

LIGHTNING PEAK
DIVISION OF JUVENILE JUSTICE
ROOFING IMPROVEMENTS

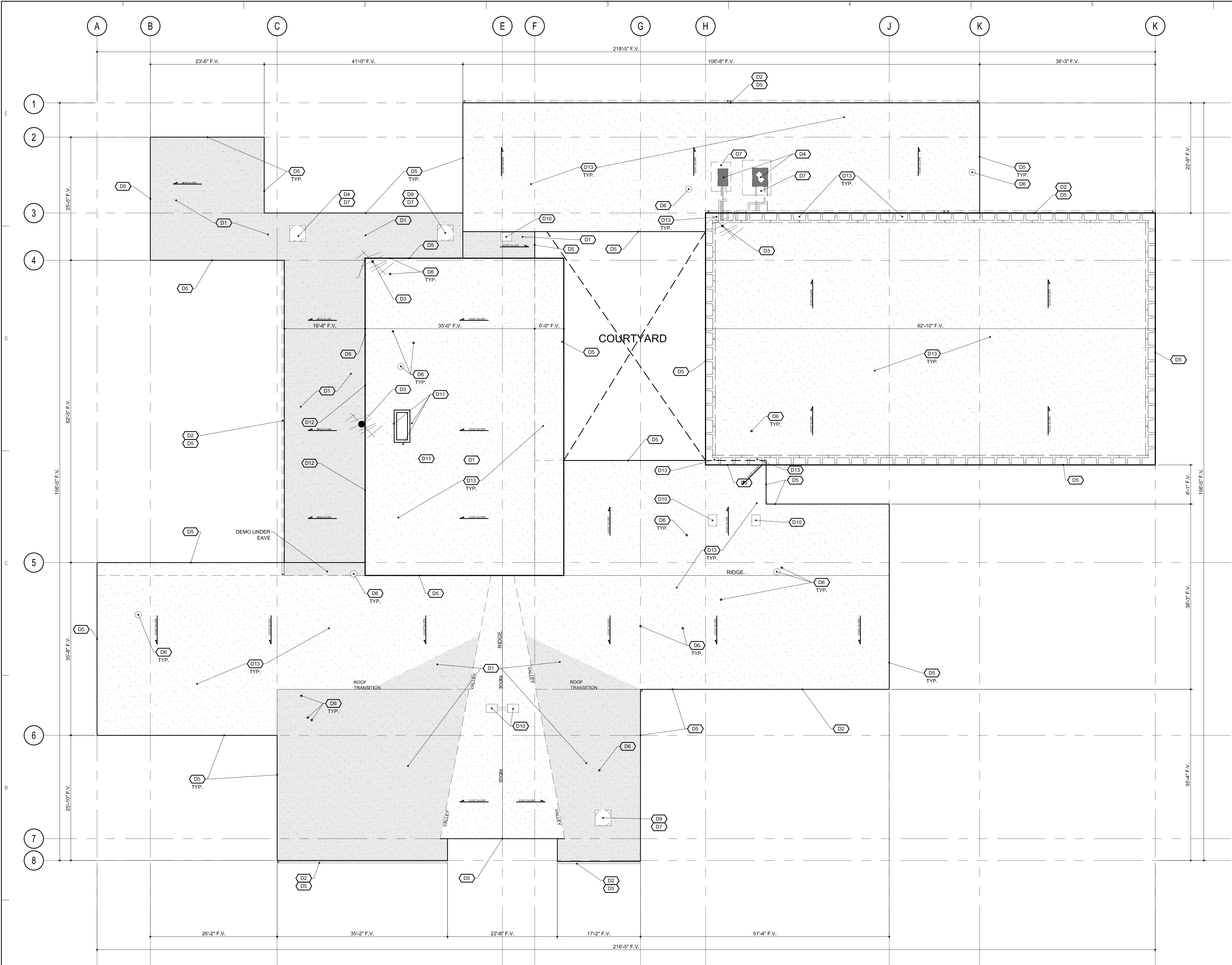
1955 SOUTH. DAKOTA LANE - PROVO, UT 84606 - DFCM 07152430

Revision # Date
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Axis Job # 0716-DFCM
Owner #
Date 08/10/2007
Drawn SLF
Checked AT

GENERAL INFORMATION

GI101



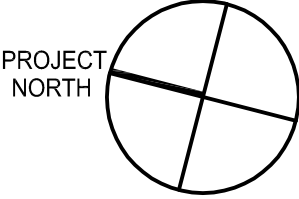
DEMOLITION KEYNOTE LEGEND

- D1 REMOVE EXISTING ROOFING SYSTEM DOWN TO EXISTING CONCRETE ROOF DECK, REMOVE EXISTING ROOF SYSTEM FROM ALL PARAPET WALLS, MECHANICAL PIPING AND VENTS
- D2 REMOVE EXISTING RAIN GUTTER AND DOWN SPOUTS.
- D3 REMOVE AND SALVAGE FOR OWNER T.V. ANTENNA, WIRES AND FASTENERS
- D4 REMOVE EXISTING HVAC CONDENSING UNITS, DISCONNECT ELECTRICAL LINES FROM JUNCTION BOX, DISCONNECT MECHANICAL LINES WHERE REQUIRED.
- D5 REMOVE ALL EXISTING METAL FLASHING AND EDGE METAL, TYPICAL
- D6 REMOVE ALL EXISTING MECHANICAL VENT FLASHING, TYPICAL
- D7 REMOVE EXISTING MECHANICAL CURB
- D8 REMOVE EXISTING MECHANICAL EXHAUST VENT
- D10 REMOVE EXISTING BUILD UP CURB AND TURTLE VENT
- D11 REMOVE FLASHING AND EXISTING ROOF SYSTEM FROM STONE CHIMNEY
- D12 REMOVE EXISTING ROOF SYSTEM OFF OF EXISTING WALLS, LOUVERS ETC.
- D13 REMOVE EXISTING SPRAYED APPLIED POLYURETHANE SPRAYED ON FOAM ROOF SYSTEM DOWN AS REQUIRED TO RECEIVE NEW ROOF SYSTEM, REMOVE FROM ALL PARAPET WALLS AND DOUBLE T CONCRETE WALLS TYP.

GENERAL DEMOLITION NOTES

- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION.
- WHERE EXISTING ROOF DEMOLITION IS INDICATED, MEASURES MUST BE TAKEN TO AVOID DAMAGING OTHER BUILDING ELEMENTS. WHERE INSULATION REMOVAL IS INDICATED, MEASURES MUST BE TAKEN TO AVOID DAMAGING EXISTING CONCRETE DECK OTHER BUILDING ELEMENTS. MUST KEEP BUILDING WATER TIGHT DURING CONSTRUCTION.
- ELECTRICAL CONDUIT / UTILITIES MAY BE EXPOSED DURING DEMOLITION. CONTRACTOR TO PROTECT
- DISCONNECT UTILITIES TO MECHANICAL UNITS PRIOR TO REMOVAL. SECURELY STORE FOR RE-INSTALLATION AS INDICATED. EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR.
- CONTRACTOR TO COORDINATE DEMOLITION STAGING AREAS WITH OWNER.
- CONTRACTOR TO PROVIDE AND USE WASTE CHUTE FOR DEMOLITION DEBRIS. DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR

A1 ROOF DEMOLITION PLAN
SCALE: 1/8"=1'-0"

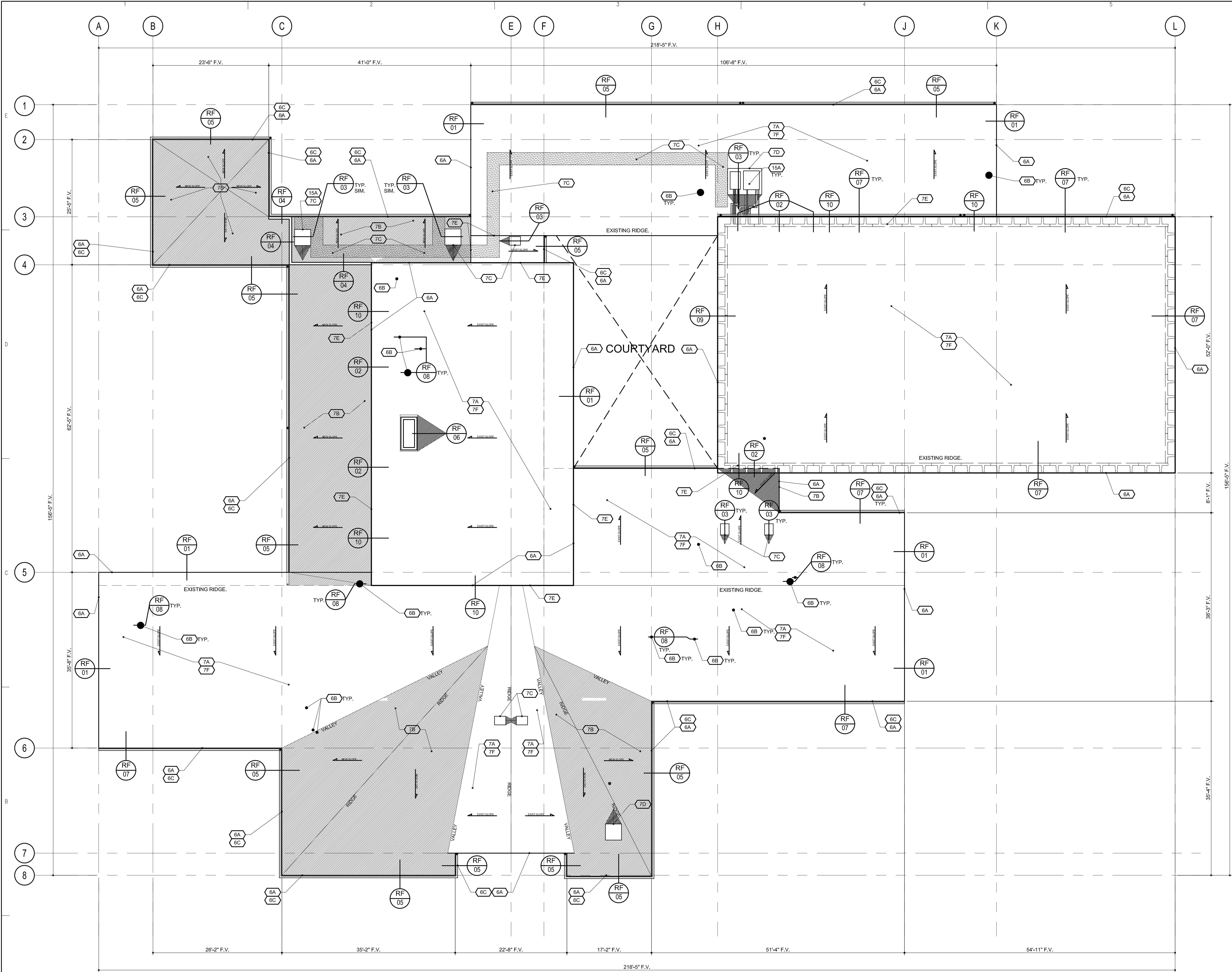


LIGHTNING PEAK
DIVISION OF JUVENILE JUSTICE
ROOFING IMPROVEMENTS
1955 SOUTH DAKOTA LANE - PROVO, UT 84606 - DFCM 07152430

Revision # Date

Axis Job # 0716-DFCM
Owner #
Date 08/10/2007
Drawn AWH-SLF
Checked AT

DEMOLITION PLAN



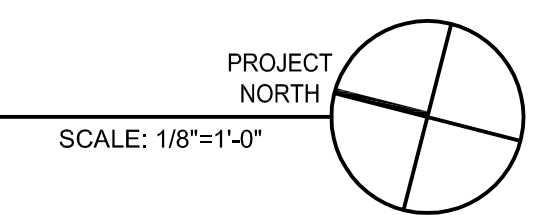
KEYNOTE LEGEND

6. METALS:
- 6A NEW PRE FINISHED METAL GRAVEL STOP AT EDGE OF ROOF
 - 6B NEW VENT FLASHING. VERIFY EXISTING VENTS EXTEND 8" MIN. ABOVE NEW ROOF MEMBRANE.
 - 6C NEW PRE FINISHED METAL RAIN GUTTER WITH DOWN SPOUTS AND SPLASH BLOCKS AT 30" O.C. - EXACT LOCATION TO BE COORDINATED WITH OWNER AND ARCHITECT.
7. THERMAL AND MOISTURE PROTECTION:
- 7A NEW FULLY ADHERED SINGLE PLY MEMBRANE. OVER 1/2" DENS DECK SHEATHING, OVER EXISTING ROOFING SYSTEM.
 - 7B NEW FULLY ADHERED SINGLE PLY MEMBRANE OVER NEW TAPERED RIGID INSULATION. SLOPE RIGID INSULATION TO A MINIMUM OF 1/8" / FT. TO DRAIN. OVER 1/2" DENS DECK PRIME OVER EXISTING CONCRETE ROOF DECK.
 - 7C 30" WIDE NEW WALKABLE MEMBRANE OVER NEW MEMBRANE.
 - 7D NEW WOOD CURB MIN. 8" ABOVE NEW ROOF MEMBRANE VERTICAL ABOVE EXISTING RIGID INSULATION. FILL CENTER VOID WITH BLOCKING AND RIGID INSULATION. COVER NEW PLATFORM WITH NEW PRE FINISHED METAL CAP OVER 2 LAYERS OF 1/2" PLYWOOD SHEATHING. APPLY SEALANT AT EACH FASTENER. INSTALL NEW CRICKET TO DRAIN.
 - 7E FULLY ADHERE SINGLE PLY MEMBRANE AT ALL VERTICAL SURFACES TYPICAL.
 - 7F EXISTING SLOPE TO REMAIN
15. MECHANICAL AND PLUMBING:
- 15A REINSTALL ALL MECHANICAL AND ELECTRICAL EQUIPMENT TYPICAL.

GENERAL NOTES

- CONTRACTOR TO FIELD VERIFY THE SIZE AND LOCATION OF ALL EQUIPMENT AND PENETRATIONS INDICATED ON THE CONSTRUCTION DOCUMENTS
- CONTRACTOR MUST MAINTAIN A WATER TIGHT BUILDING FROM DEMOLITION THROUGH COMPLETION OF CONSTRUCTION.
- CONTRACTOR TO VERIFY ALL VENT STACKS AND MECHANICAL CURBS MEET THE MINIMUM 8" CLEARANCE ABOVE NEW FINISHED ROOF.
- VERIFY ALL DIMENSIONS IN FIELD PRIOR TO BID.
- DISCONNECT POWER AND UTILITIES TO ALL ROOF EQUIPMENT PRIOR DEMOLITION AND CONSTRUCTION.

A1 ROOF PLAN



SCALE: 1/8"=1'-0"